IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A memory medium which stores program instructions for displaying signals, wherein the program instructions are executable to implement:

displaying a default display tool, wherein the default display tool is operable to display signals of a default data type;

receiving first user input requesting display of a first signal;

programmatically analyzing the first signal in response to the first user input, including determining a data type of the signal;

programmatically determining a display tool operable to display the first signal based on said analyzing, wherein the display tool is programmatically determined based on the determined data type, said programmatically determining comprising:

selecting the default display tool as the display tool if the determined data type is compatible with the default data type; and

if the determined data type is not compatible with the default data type,

determining a replacement display tool operable to display signals of the determined data type; and

selecting the replacement display tool as the display tool; and

displaying the first signal in the display tool.

2. (Original) The memory medium of claim 1, wherein the program instructions are further executable to implement:

displaying a Graphical User Interface (GUI);

wherein said receiving first user input comprises receiving said first user input to the GUI; and

wherein said displaying the first signal in the display tool comprises displaying the first signal in the GUI.

3. (Original) The memory medium of claim 2, wherein the GUI is comprised in a signal analysis function development environment.

4. (Original) The memory medium of claim 1, wherein the first signal comprises signal data.

5. (Original) The memory medium of claim 4, wherein the signal data comprise signal plot data, and wherein the display tool comprises a graph.

6. (Original) The memory medium of claim 4, wherein the signal data comprise tabular data, and wherein the display tool comprises a table.

7. (Original) The memory medium of claim 4, wherein the display tool comprises an indicator operable to display the signal data.

8. (Cancelled)

9. (Currently Amended) The memory medium of claim [[8]] 1, wherein said programmatically determining the display tool based on the determined data type comprises:

performing a table look-up based on the determined data type to determine the display tool.

10. (Currently Amended) The memory medium of claim [[8]] 1, wherein the data type of the signal comprises one or more of:

time-domain;

frequency-domain; and

spatial-domain.

11. (Currently Amended) The memory medium of claim [[8]] 1, wherein the data type of the signal comprises one or more of:

integer;

floating point;

Boolean.

12. (Currently Amended) The memory medium of claim [[8]] 1, wherein the data type of the signal comprises a user-defined data type.

13. (Original) The memory medium of claim 12, wherein the display tool comprises a user-defined display tool.

14. (Cancelled).

15. (Currently Amended) The memory medium of claim [[14]] 1, wherein said determining the replacement display tool comprises creating the replacement display tool.

16. (Currently Amended) The memory medium of claim [[14]] 1, wherein said receiving first user input requesting display of a first signal comprises:

the user dragging and dropping a signal icon corresponding to the first signal onto the default display tool.

17.-22. (Cancelled)

23. (Currently Amended) The memory medium of claim 1, wherein the program instructions are further executable to implement:

receiving second user input requesting display of a new display tool;

displaying [[a]] the default display tool in response to the second user input, wherein the default display tool is operable to display signal data of [[a]] the default data type;

receiving third user input requesting display of a second signal,

programmatically analyzing the second signal in response to said third user input to determine a data type of the second signal; and

if the determined data type of the second signal is compatible with the default data type,

displaying the second signal in the default display tool; and

if the determined data type is not compatible with the default data type,

replacing the default display tool with a replacement display tool operable to display the second signal; and

displaying the second signal in the replacement display tool.

24. (Currently Amended) A method for displaying signals, comprising:

displaying a default display tool, wherein the default display tool is operable to display signals of a default data type;

receiving first user input requesting display of a first signal;

programmatically analyzing the first signal in response to the first user input, including determining a data type of the signal;

programmatically determining a display tool operable to display the first signal based on said analyzing, wherein the display tool is programmatically determined based on the determined data type, said programmatically determining comprising:

using the default display tool as the display tool if the determined data type is compatible with the default data type ; and

if the determined data type is not compatible with the default data type,

determining a replacement display tool operable to display signals of the determined data type; and

using the replacement display tool as the display tool; and

displaying the first signal in the display tool.

25. (Currently Amended) A system for displaying signals, comprising:

a processor; and

a memory coupled to the processor, wherein the memory stores program instructions for specifying a signal analysis function, wherein the program instructions are executable by a processor to:

display a default display tool, wherein the default display tool is operable to display signals of a default data type;

receive first user input requesting display of a first signal;

programmatically analyze the first signal in response to the first user input, including determining a data type of the signal;

programmatically determine a display tool operable to display the first signal based on said analyzing, wherein the display tool is programmatically determined based on the determined data type, comprising:

select the default display tool as the display tool if the determined data type is compatible with the default data type; and

if the determined data type is not compatible with the default data type,

determine a replacement display tool operable to display signals of the determined data type; and

select the replacement display tool as the display tool; and

display the first signal in the display tool.

26. (Currently Amended) A system for displaying signals, comprising:

means for displaying a default display tool, wherein the default display tool is operable to display signals of a default data type;

means for receiving first user input requesting display of a first signal;

means for programmatically analyzing the first signal in response to the first user input, including means for determining a data type of the signal;

means for programmatically determining a display tool operable to display the first signal based on said analyzing, including means for programmatically determining the display tool based on the determined data type, comprising:

means for selecting the default display tool as the display tool if the determined data type is compatible with the default data type; and

means for determining a replacement display tool operable to display signals of the determined data type and replacing the default display tool with the

replacement display tool, if the determined data type is not compatible with the default data type; and

means for displaying the first signal in the display tool.

27. (New) A memory medium which stores program instructions for displaying signals, wherein the program instructions are executable to implement:

displaying a first display tool, wherein the first display tool displays a prior signal of a first data type;

receiving first user input requesting display of a first signal;

programmatically analyzing the first signal in response to the first user input, including determining a data type of the signal;

programmatically determining a display tool operable to display the first signal based on said analyzing, , wherein the display tool is programmatically determined based on the determined data type, said programmatically determining comprising:

selecting the default display tool as the display tool if the determined data type is compatible with the default data type; and

if the determined data type is not compatible with the default data type,

determining a replacement display tool operable to display signals of the determined data type; and

selecting the replacement display tool as the display tool; and

displaying the first signal in the determined display tool.

28. (New) The memory medium of claim 27, wherein said displaying the first signal in the display tool comprises:

if the determined data type is compatible with the first data type,

displaying the first signal in the first display tool with the prior signal; and

if the determined data type is not compatible with the first data type,

displaying the second display tool; and

displaying the first signal in the second display tool.

29. (New) The memory medium of claim 28, wherein said determining the second display tool comprises creating the second display tool.

30. (New) The memory medium of claim 27, wherein said receiving first user input requesting display of a first signal comprises:

the user dragging and dropping a signal icon corresponding to the first signal onto the first display tool.

31. (New) A memory medium which stores program instructions for displaying signals, wherein the program instructions are executable to implement:

displaying a plurality of display tools, wherein the plurality of display tools correspond respectively to a plurality of data types, and wherein each display tool displays one or more respective signals of a respective data type of the plurality of data types;

receiving first user input requesting display of a first signal;

programmatically analyzing the first signal in response to the first user input, including determining a data type of the signal;

programmatically determining a display tool operable to display the first signal based on said analyzing, wherein the display tool is programmatically determined based on the determined data type, said programmatically determining comprising:

programmatically determining if the plurality of display tools comprises a matching display tool operable to display signals of a data type compatible with the determined data type;

if the plurality of display tools comprises a matching display tool,

selecting the matching display tool as the display tool; and

if the plurality of display tools does not comprise a matching display tool,

determining a second display tool operable to display signals of the determined data type, and selecting the second display tool as the display tool; and

displaying the first signal in the display tool.

32. (New) The memory medium of claim 31, wherein said displaying the first signal in the display tool comprises:

if the plurality of display tools comprises a matching display tool,

displaying the first signal in the matching display tool; and

if the plurality of display tools does not comprise a matching display tool,

displaying the second display tool; and

displaying the first signal in the second display tool.

33. (New) A memory medium which stores program instructions for displaying signals, wherein the program instructions are executable to implement:

receiving first user input requesting display of a first signal;

programmatically analyzing the first signal in response to the first user input;

programmatically determining a display tool operable to display the first signal based on said analyzing; and

displaying the first signal in the display tool;

receiving second user input requesting display of a new display tool;

displaying a default display tool in response to the second user input, wherein the default display tool is operable to display signal data of a default data type;

receiving third user input requesting display of a second signal,

programmatically analyzing the second signal in response to said third user input to determine a data type of the second signal; and

if the determined data type of the second signal is compatible with the default data type,

displaying the second signal in the default display tool; and

if the determined data type is not compatible with the default data type,

replacing the default display tool with a replacement display tool operable to display the second signal; and

displaying the second signal in the replacement display tool.